where at least the flame retardant is provided as a compounded first masterbatch, and preferably also the UV stabilizer, where the UV stabilizer is thermally stable at temperatures exceeding 240°C, is provided in the first masterbatch or as a compounded second masterbatch during production of the film.

Please amend claim 2 as follows:

2. (Amended) The film as claimed in claim 1, wherein the crystallizable thermoplastic comprises polyethylene terephthalate, polybutylene terephthalate or polyethylene naphthalate.

REMARKS

Restriction has been required to limit the invention to the Claims of one of the following groups:

Group I: Claims 1 – 12, drawn to an oriented film, classified in class 428, subclass 480.

Group II: Claims 13 – 18, drawn to a process for making an oriented film via extrusion, classified in class 523, subclass 351.

The Examiner is of the opinion that the claims of Group I and II define different inventions. In order to be fully responsive to the Official Action, Applicants elect to retain the claims of Group I for further prosecution in the subject case, but Applicants retain the right to file one or more divisional applications or take other appropriate action to protect the invention lying within Group II.

Applicants have directed the Examiner to cancel claims 13 - 18 directed to the non-elected group. This election is an affirmation of our conversation (Dr. Schweitzer & Examiner Nikolas Uhlir) on 12/05/01.

The inventors Ursula Murschall, Urich Kern, Guenther Crass and Andreas Stopp are all inventors in the claims drawn on Group I.

Claims 2 stands rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly to point out and distinctly claim the subject matter.

Pursuant to the Examiner's suggestion, claim 2 has been amended removing the phase "preferably polyethylene terephthalate".

Claims 1 – 4 and 7 – 8 and 12 have been rejected under 35 U.S.C. 103(a) by the Examiner's as being obvious.

The Examiner notes that the language in claim 1 "fed directly as a masterbatch during production of the film" is a product by process that does not appear to be further limiting in terms of evaluating the prior art since it is not further limiting in so far as the structure of the final product is concerned. Amended claim 1 addresses the structure of the final product and also is now drafted so as to clearly distinguish the elective claims from the non elective claims 13 – 18, which are a process claims, and as presently amended claim 1 does clarify the metes and bound of the invention. In claim 1, the components of the transparent crystallizable thermoplastic film are more precisely defined. The flame retardant is defined as being provided as compounded in a first masterbatch, and the UV stabilizer,

which by necessity has enhanced thermal stability, is also provided either in the first masterbatch or as a separate compounded masterbatch. Applicants are sure the Examiner understands that a masterbatch contains a higher concentration of ingredients relative to the normal concentration in the finish product. The ingredients, in this case the flame retardant and UV stabilizer, usually would result in increased viscosity, and the masterbatch has to be processed at higher temperatures. The advantage of compounding a film composition with a masterbatch is that improved mixing is realized, as the masterbatch and the crystallizable thermoplastic have similar viscosities, and the stabilizers in this case, UV and thermal, are already pre-dispersed and/or dissolved in the polymer carrier for the masterbatch. Claim 1 now clearly points out these improvements. The Examiner cites Rakos et al., U.S.P 6,251,505, as teaching applicants' invention. In general, Rakos et al.'505 teach that the

inclusion of the silica in a range of 1 – 8% can cause the light to diffuse through the film. Too little silica, and that is reported to be below about 1%, and results in little light scatter. Too much silica, and that would be above 8%, the film becomes too opaque creating excessive haze in the film. Rakos et al. '505 does not teach the incorporation of flame-retardants in film, nor does he teach the utility of including flame retardants or UV stabilizers in a compounded masterbatch. Furthermore, Rakos et al. '505 does not teach the necessity for utilizing UV stabilizer having thermal stability in excess of 240°C.

Oishi et al., U.S.P. 5,936,048, does teach the utilization of adding UV stabilizers and, in particular, as Examiner points out, Oishi et al. teach the utility of adding selective phosphorous compounds, Col 21, lines 4 – 11. Oishi et al.'048 teach that phosphorous can exert "a synergistic effect that a flame – retarding effect can be further improved". While this particular quote is a little unclear, it is clear that to have synergism one must have at least two components. The synergistic effect works in the presence of compound B, given on Col. 8, lines 21 – 40, which is a norbornenyl compound further consisting of a triazinyl and carboxylate group. Examiner does not address whether or not compound B, which is required for the performance of the phosphorous compounds is colorless. However, it is highly doubtful that compound B would be useful in a transparent film, as the number of double bonds are present creating a conjugated double bond system, which to those familiar

with the chemical art, would predict that according to Woodward Rules, compound B is probably highly colored, as it essentially looks like a pigment. The additive would be unsuitable in a clear film. In any case, Applicants do not teach that a norbornenyl triazinyl compound is required, nor have desire for preparing a transparent film, where the film and the components in the masterbatch have thermal stability in excess of 240°C.

Also neither Rakos et al.'505 nor Oishi et al.'048 teach whether their films will past fire test DIN 4102 part I and II, and also UL 94. Furthermore, Rakos et al.'505, and Oishi et al.'048 does not disclose, nor are they concerned with, outdoor aging, as simulated by the Atlas Ci 65 Weather–Ometer. Applicants' films met the test specification for ISO 4892 for 1000 hours.

Gareiss et al., U.S.P. 5,712,336, is noted by the Examiner to teach flame – proof thermoplastic molding material that is comprised of thermoplastic polyester additives.

Applicants acknowledge that the use of UV stabilizers, such as substituted resorcinol, benzotriazoles, and benzophenones are well known as UV stabilizers. Gareiss et al.'336, as well as teaching the use of the iterated compounds mentioned above, also teaches the use of the metal oxides, metal sulfides and metal borates or mixtures thereof, and the use of these compounds would result in a film that was opaque, and obviously would have different yellowing characteristics then a clear film as the opacity of the film would prevent the transmittance of light through the film. In the example, given on Col. 10, line 24 of Gareiss et al. '336 the thermoplastic also includes antimony trioxide, which is opaque, and is insoluble in the polyester or any crystallizable thermoplastic such as, polyethylene terephthalate, polybutylene terephthalate or polyethylene naphthalate.

Examiner cites that Peiffer et al., U.S.P. 6,280,833, teach the use of the alkali and alkaline earth metal stearates and carbonates.

Applicants teach the use of UV stabilizers that possess thermal stability in temperatures in excess of 240°C. As previously mentioned, this high thermal stability is

necessary for concentrating the UV stabilizer in a masterbatch, which can be admixed with the crystalline thermoplastic (i.e. PET) during the extrusion process. Peiffer et al.'833 stabilizer system is designed to be used with polypropylene, which has a significantly lower melting temperature then PET, and polypropylene is much more susceptible to UV degradation than polyesters and polyamides. Furthermore, Peiffer et al.'833 does not teach the utility of additives to impart improved weathering.

Since the amendment to the claims does not add more claims then previously paid for, no additional fee is required.

Attached hereto is a marked-up version of the changes made to the specification and to the claims by the current amendment. The attached page is captioned "**Version With Markings To Show Changes Made**".

In view of the foregoing amendment and these remarks, this application is now believed to be in condition for an action on the merits, and such favorable action is respectfully requested on behalf of Applicants.

Respectfully submitted,

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Attorney's Docket No. 00/002 MFE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1 – 2 have been amended as follows:

1. (Amended) A transparent, low-flammability, UV-resistant, oriented film made from a film forming ~~a crystallizable~~ thermoplastic and having a thickness of from 5 to 300 µm, wherein the film comprises:

at least one crystallizable thermoplastic;

at least one UV stabilizer;~~,~~ and

at least one flame retardant;~~,~~

where at least the flame retardant is provided as a compounded first masterbatch, and preferably also the UV stabilizer, where the UV stabilizer is thermally stable at temperatures exceeding 240°C, is provided in the first masterbatch or as a compounded second masterbatch ~~is fed directly as a masterbatch to the crystallizable thermoplastic~~ during production of the film.

2. (Amended) The film as claimed in claim 1, wherein the crystallizable thermoplastic comprises polyethylene terephthalate, polybutylene terephthalate or polyethylene naphthalate, ~~preferably polyethylene terephthalate~~.